local power

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Draft Energy Resource Investment Plan California Power Authority 901 P Street, Suite 142A Sacramento, CA 95814

Dear CPA Staff:

We are submitting comments as authors of both San Francisco's 50 Megawatt Solar Power Facility and its financing authority, Proposition H, approved by voters last November, which will develop a citywide solar photovoltaic network not merely on government properties, but on residences and businesses as well. Moreover, we submit the following comments as authors of the Community Choice bill, AB117 (Assemblymember Migden, D-SF), which provides for inclusive aggregation of community energy services by city governments, including long-term power supply contracts and energy efficiency services, on behalf of all customer classes: residential, commercial, industrial and government.

We will start by emphasizing that this an excellent Draft Report both in the breadth of its ambition and the quality of its conceptualization, and hope that our municipally-oriented critique will be taken in the context of these remarks. The CPA is taking bold steps in a rapidly changing industry, and we are only attempting to inject new information from one of the more dramatic changes into your efforts.

Summary

We submit these comments to raise your awareness of the manner in which municipalities can make large-scale renewable energy development successful in coming years. A broad observation is that the CPA should consider not merely the Department of Water Resources, but municipalities, as its partners in this venture.

Our perspective comes from ten years of experience writing state Community Choice laws and local Community Power ordinances in every state that has one in its books. The 1992 Rio Summit on Climate Change called on local governments to take a lead role in the fight against Global Warming. We have been working with California local governments since 1995, many of which have joined the call for Community Choice and are now preparing to implement energy plans comparable to San Francisco's.

We view municipally-bid performance contracting as the future of the electric industry. Both Community Choice and Community Power are designed for local governments whose communities are served by investor-owned utilities, and both create local public

process and local control while transferring performance risk to private sector suppliers and service companies. Large consortia of energy companies will bid to serve whole metropolitan communities. Renewable distributed generation will become a required part of a community's power supply much as recycling has become a required component of municipal and county garbage collection.

We applaud the Draft Investment Plan's declaration calling for "clean-growth" strategy with an "aggressive investment in energy efficiency and renewable energy resources" and are heartened to see the CPA's goal of 8000 MW of new capacity by 2006 in its Draft Investment Plan. Clearly, the CPA is determined to re-establish California as a national and world leader in promoting energy sustainability.

We hope the CPA will recognize the importance of California local governments in making its programs successful. In particular, we ask that you consider municipalities not merely as electricity customers but as **community aggregators** with their own revenue bond authority and avoid misguided policies that inadvertently disaggregate California communities.

The Draft Plan Needs and Updated Concept of Municipal Aggregation

As a broad observation, the Draft Report's definition of "Government Aggregation" is often too narrow, reflecting the pre-San Francisco Proposition H, pre-Community Choice world of Direct Access in which a local government was merely another customer, apart from the residents and businesses in its jurisdiction.

An example of the old paradigm's presence in the Draft Plan is the year 2000 Local Government Commission study cited in the Plan indicating that 1700 MW of photovoltaics could cost-effectively be installed on municipal and school buildings scattered across the state via an aggregated purchase/installation program. The contractual separation of municipal and school buildings from their surrounding communities reflects the old, pre-San Francisco, pre-Community Choice paradigm in which local governments attend merely to their own facilities rather than representing the community as a whole. The idea of "aggregating" local government buildings across thousands of miles reflects the economic error of Direct Access by ignoring the natural efficiency of local community aggregations that include all customer classes: residential, commercial and government.

We want to impress on you the importance of a regional, community-based approach to renewable resource development rather than the bureaucracy-based approach (innocently) implied in the Local Government Commission's study. Certainly, schools and public buildings should host installations, but they are community resources that should be developed *in conjunction with* their communities, not separately. The danger in continuing in this manner today is that programs based on this kind of thinking in effect

¹ Christy Herig, National Renewable Energy Laboratory, "Assessing Rooftop Solar-Electric Distributed Energy Resources for the California Local Government Commission", October 2000.

cherry pick government facilities (which are cheaper to build anyway) from their surrounding communities. We advise strongly against such an approach.

Partnership with San Francisco

We welcome the idea of a "Photovoltaic Partnership with the City of San Francisco" suggested in the Draft plan. The CPA and the City could indeed combine resources to commercialize solar power, and this could ostensibly include "the CPA's bulk procurement program and sharing experiences." (p. 27)

The wisest goal of such a partnership is to learn *how best* the CPA should enter into partnerships with municipalities whose communities are served by investor-owned utilities. Local Power would like to work closely with the CPA to ensure harmonization of efforts and standardization of contracts.

Municipalities Can Establish a Market

A key role that municipalities can play with respect to the CPA'a plan is to help secure revenue streams. As the Draft Report indicates, "there are, at present, two major impediments to grid renewable projects. The first is the lack of a wholesale market, either through long-term bilateral contracts or active bidding in short-term markets" (p. 17).

Municipalities can establish such markets by entering into long-term bilateral contracts between energy contractors and their communities. This intermediary role, generally speaking, is the central fact of our observations today.

Municipalities Can Establish Revenue Security

Municipalities can facilitate the "customer financing repayment" process called for in the Draft Plan: "another key to successful implementation is the quality of credit support behind any financing. One key is a creditworthy buyer of any grid level power. A second key is the use of the utility bill and other mechanisms that provide major lenders a level of confidence in the repayment of consumer and business loans." (p.5)

It would be unwise for the CPA to limit its conceptualization of "customer financing repayment via utility bills" to the state's investor-owned utilities. "CPA is exploring an option for customers to repay their loans via utility bills. This will require the cooperation of distribution utilities and their regulatory bodies (PUC or public power boards)." (p. 27) In another section the Draft Plan suggests that the Department of Water Resources might contract for the power, placing it in the rate base, and that these contracts could later be assignable to the investor-owned utilities when their credit is restored.

This conceptualization ignores the example being established by San Francisco. City governments are the most appropriate institutions to play the role that is being sought here. First, even without a Community Choice law, most city governments already have

revenue bond authority. Second, lease contracts with residential, commercial and government end use customers can provide the repayment security the CPA is seeking. Finally, if Community Choice is enacted, cities will also have the ability to use utility bills to repay systems, making customer financing repayment possible through a state-local partnership. Again, we are eager to work with the CPA to help develop its relationship to city governments in this crucial area of public policy.

Green Pricing Already Failed

We are concerned to see the Draft Plan indicate that "legislation or CPUC rulings could require utilities to offer green pricing programs to their customers. CPA could act as the broker or supplier of the renewable power for this program." (p. 18) Green pricing failed as a policy during California's deregulation law, and should not be counted among significant opportunities for CPA power. Even with hefty marketing efforts from green power companies like Green Mountain Power, after three years of Direct Access, green pricing counted for less than one percent of the power sold in California; of this, more than half was purchased by local governments for public facilities. The only way to establish support for the scale of green energy investment sought by the CPA is through a public process, not individual customer choice.

Financial Partnerships:

The report indicates that the CPA expects over the next five years to leverage its \$5 billion of bond authority with at least \$2-5 billion, or as much as \$8-12 billion of financing for implementing the plan, from the private sector and other public organizations with co-financing such as the Federal National Mortgage Association (FNMA), some power project developers and several private financial institutions." (p.5)

Again, municipalities appear to be ignored where they should be emphasized. Most California municipalities have lower interest revenue bond financing authority already in place, and should certainly be put at the top of this list.

Performance Guarantees/Warranties 5 Years?

We are concerned at the weak performance guarantee standards implied in the report; "The joint CPA/Department of General Services (DGS) RFB process seeks volume pricing on standard sets of high-quality distributed generation technology. The bids require five-year performance warranties and service agreements; a longer-term performance guarantee pooled-risk arrangement can increase the likely investment in such technologies." (p.16)

First, state of the art warranties in the PV industry last 20 years, not 5. Furthermore, it is critical for the establishment of revenue security on any system that warranty periods last at least as long as an installation's financial life.

Long Term Financing

On this note, the Draft Report's recommendation that its programs involve "financing or leasing at longer than typical commercial terms to produce monthly costs competitive with business-as-usual equipment and retail energy rates (e.g. for non-residential distributed generation and residential solar) (p.16) implies longer-term financing contracts which would imply lengthier warranties or service agreements.

However, we will add a word of caution on this note. If the CPA is truly committed to performance contracting for the lowest cost equipment, it should reconsider traditional PV revenue models designed to minimize monthly payments on a system. On our calculations, 20 year paybacks at 5% add 58% to the cost of a system. Under a performance contracting method that does not hide such extra costs, it is indeed unwise to pursue long-term debt if it is unnecessary.

In San Francisco, contractor bids will be accepted on a per kilowatt hour basis, not on a capacity basis, meaning you need not compete with business-as-usual monthly power bills. We would like to work with CPA staff to improve on this element.

Conclusion

The CPA has made a dramatic declaration of intent to bring a new scale to renewable energy and conservation development in California. With its massive financial power, this is indeed a real prospect that deserves a great deal of support.

We encourage the CPA to look to city government as its partner in this effort. We would refer you not only to the dozens of California cities passing resolutions in support of answering the Rio Summit on Climate Change, not only to San Francisco's 2001 commitment to solar power, but the dozens of cities that have passed resolutions or testified for a Community Choice law: or the many that have applied to the CPUC to run energy efficiency programs. If you look, you will realize that city government is a natural ally to and an essential component of the bold program you have proposed.

In the interest of making it successful, we offer our services in forging a partnership between the CPA and California cities, which will prove critical to establishing a market, securing revenue streams, and creating a relationship with the residents, businesses and government agencies that will ultimately pay for these systems at the end of the day.

Thanks for your consideration,

Paul Fenn Director